From: William Benson
To: Mace Barron

Subject: Re: Dispersant causes more harm than good in oil spill cleanups -- study

Date: 12/08/2012 09:20 AM

Sounds good.

▼ Mace Barron---12/07/2012 06:59 PM EST---Here is from Bob's email (i think Bob and I are on same page. His email back to me he was going to "

| | From: | Mace Barron |
|-----|----------|---|
| То: | | William Benson |
| | Date: | 12/07/2012 06:59 PM EST |
| | Subject: | Re: Dispersant causes more harm than good in oil spill cleanups study |

Here is from Bob's email (i think Bob and I are on same page. His email back to me he was going to "take a pulse" to see if any policy concerns. Will wait for that until proceeding further).

proceeding further).

"In light of your comments about the potential tip of the iceberg, what do you think about a letter to the editor of some noteworthy journal (ES&T, SETAC, ToxSci) articulating some of the generic points that are important to consider when conducting dispersant research? At least we would have a marker down. "

Sent by EPA Wireless E-Mail Services

▼ William Benson---12/07/2012 06:24 PM EST---I may be behind emails, but, yes, always good to clarify as my reading of emails was: Bob had sugges

| | | From: | William Benson |
|-----|----------|-------|--|
| То: | | | Mace Barron |
| | Date: | | 12/07/2012 06:24 PM EST |
| | Subject: | | Re: Dispersant causes more harm than good in oil spill cleanups study |

I may be behind emails, but, yes, always good to clarify as my reading of emails was:

Bob had suggested writing what amounts to a rebuttal of the paper suggesting synergy, and you counter-offered with:

Writing a reasonably comprehensive "EPA Perspective" on dispersant use.

Now I may be wrong in my interpretation, but the above strikes me as two effective but different approaches.

Seema is the best to contact re: getting on Bob's calendar for a call. He is very much booked Tuesday and parts of Wednesday, but you may get 15 min or so Monday, or later in the week. In any case, be assured that Bob is committed to getting the best science out there and having the best EPA science known. Bob is a true bright spot for science in the ORD and DC environ; there are others of course (e.g., Jim Jones, Steve Bradbury), but Bob is ORD's superstar.

▼ Mace Barron---12/07/2012 06:10 PM EST---I took it as EPA's perspective on interpreting the fate/effects of using dispersants in oil spill st

| | From | n: | Mace Barron |
|-----|----------|----|--|
| То: | | | William Benson |
| | Date: | | 12/07/2012 06:10 PM EST |
| | Subject: | | Re: Dispersant causes more harm than good in oil spill cleanups study |

I took it as EPA's perspective on interpreting the fate/effects of using dispersants in oil spill studies: highlight tech issues such as weathering, measured vs nominal, species, mixing etc. A what are elements of a good study/extrapolation/ what contributes uncertainty.

Prob good we clarify the scope soon! Sent by EPA Wireless E-Mail Services

▼ William Benson---12/07/2012 05:27 PM EST---Bob's idea was to write a response - correct? That's how the human studies issue was approached. W

| | From: | William Benson |
|-----|-------|-------------------|
| To: | | Mace Barron |

| Date: | 12/07/2012 05:27 PM EST |
|----------|--|
| Subject: | Re: Dispersant causes more harm than good in oil spill cleanups study |

Bob's idea was to write a response - correct? That's how the human studies issue was approached. Wayne Cascio led the response effort - very well done.

▼ Mace Barron---12/07/2012 05:04 PM EST---Will do. I liked Bob's idea! Sent by EPA Wireless E-Mail Services

| | | From: | Mace Barron |
|-----|----------|-------|--|
| То: | | | William Benson |
| | Date: | | 12/07/2012 05:04 PM EST |
| | Subject: | | Re: Dispersant causes more harm than good in oil spill cleanups study |

Will do. I liked Bob's idea! Sent by EPA Wireless E-Mail Services

▼ William Benson---12/07/2012 04:35 PM EST---Please keep me in touch with where this goes. I think it is a good idea, and I think the question w

| | | From: | William Benson |
|-----|----------|-------|--|
| To: | | | Mace Barron |
| | Cc: | | |
| | Date: | | 12/07/2012 04:35 PM EST |
| | Subject: | | RE: Dispersant causes more harm |

Please keep me in touch with where this goes. I think it is a good idea, and I think the question will be - - what constitutes "an EPA perspective." I guess figuring that out is why Bob is paid the big bucks.

I think a response would be easy to pull off and I wonder if "an EPA perspective" requires SPC, RAF, ??? involvement.

Good luck and please keep me posted.

From: Mace Barron/GB/USEPA/US To: Robert Kavlock/DC/USEPA/US@EPA "David Dix" <dix.david@epa.gov>, Elizabeth Blackburn/DC/USEPA/US@EPA, "Rick Greene" <Greene.Rick@epamail.epa.gov>, "Megan Maguire"

<maguire.megan@epa.gov>, "David Piantanida" <piantanida.david@epa.gov>, "Hal Zenick" <zenick.hal@epa.gov>, Michael

Hemmer@EPA, Albert Venosa/CI/USEPA/US@EPA

12/07/2012 11:45 AM

Subject: Re: Dispersant causes more harm than good in oil spill cleanups --

study

I think an EPA perspective on dispersant research could be a good thing, as opposed to individual crticisms. A journal like ES&Ts policy section would be a great venue. Do you think it would get approved up the food chain?

Bob, could you explore with OEM and the Administrator's office? I am willing to lead this with a team of folks, but would want to know we would not run into any policy concerns.

sincerely, Mace

▼ Robert Kaylock---12/07/2012 10:48:13 AM---Mace Thanks for the guick response. In light of your comments about the potential tip of the icebe

From: Robert Kavlock/DC/USEPA/US Mace Barron/GB/USEPA/US@EPA

"David Dix" <dix.david@epa.gov>, Elizabeth Blackburn/DC/USEPA/US@EPA, "Rick Greene"

<Greene.Rick@epamail.epa.gov>, "Megan Maguire"
<maguire.megan@epa.gov>, "David Piantanida"
<piantanida.david@epa.gov>, "Hal Zenick" <zenick.hal@epa.gov>, Michael
Hemmer/GB/USEPA/US@EPA, Albert Venosa/CI/USEPA/US@EPA

Date: 12/07/2012 10:48 AM

Subject: Re: Dispersant causes more harm than good in oil spill cleanups --

study

Mace

Thanks for the quick response. In light of your comments about the potential tip of the iceberg, what do you think about a letter to the editor of some noteworthy journal (ES&T, SETAC, ToxSci) articulating some of the generic points that are important to consider when conducting dispersant research? At least we would have a marker down.

Bob

▼ Mace Barron---12/07/2012 10:59:48 AM---Bob, attached are comments on the Rico-Martinez rotifer paper; please let us know if you need anythi

From: Mace Barron/GB/USEPA/US
To: Robert Kavlock/DC/USEPA/US@EPA
Cc: "David Dix" <dix.david@epa.gov>, Elizabeth
Blackburn/DC/USEPA/US@EPA, "Rick Greene"
<Greene.Rick@epamail.epa.gov>, "Robert Kavlock"
<Kavlock.Robert@epamail.epa.gov>, "Megan Maguire"
<maguire.megan@epa.gov>, "David Piantanida"
<piantanida.david@epa.gov>, "Hal Zenick" <zenick.hal@epa.gov>, Michael
Hemmer@EPA, Albert Venosa/CI/USEPA/US@EPA
Date: 12/07/2012 10:59 AM
Subject: Re: Dispersant causes more harm than good in oil spill cleanups ---

study

Bob, attached are comments on the Rico-Martinez rotifer paper; please let us know if you need anything else on this.

Given the hundreds of studies conducted on the DWH spill, dispersants and oil, we anticipate there will be a substantial number of studies relating to dispersants that will be of potential concern to EPA (ie, this may be tip of iceberg).



Note that to our knowledge, the only research currently being performed on oil within ORD is not ecotoxicology focused (e.g., theme 3 SHC focused on oil product fate and efficacy, rather than tox), so we will only have professional judgement to rebutt any concerns.

sincerely,
Mace
[attachment "ORD Review of Rico Martinez et al 2012.docx" deleted by Robert
Kavlock/DC/USEPA/US]

Robert Kavlock---12/03/2012 09:17:51 PM---From: Robert Kavlock/DC/USEPA/US To: Elizabeth Blackburn/DC/USEPA/US@EPA

From: Robert Kavlock/DC/USEPA/US

To: Elizabeth Blackburn/DC/USEPA/US@EPA

"Rick Greene" < Greene.Rick@epamail.epa.gov>, "Branch Chief Mace

Barron" <Barron.Mace@epamail.epa.gov>, "Robert Kavlock" <Kavlock.Robert@epamail.epa.gov>, "Hal Zenick" <zenick.hal@epa.gov>, "David Dix" <dix.david@epa.gov>, "Megan Maguire"

<maguire.megan@epa.gov>, "David Piantanida"

<piantanida.david@epa.gov> Date: 12/03/2012 09:17 PM

Subject: Re: Dispersant causes more harm than good in oil spill cleanups --

study

Rick/Mace

Can you do a critique of the paper? Until we can evaluate it, we should stick to our talking points. As well, There is a PNAS ${\cal P}$ paper coming out tomorrow that Lek shared this morning.

----Elizabeth Blackburn/DC/USEPA/US@EPA wrote: ----

To: "Rick Greene" <Greene.Rick@epamail.epa.gov>, "Branch Chief Mace Barron" <Barron.Mace@epamail.epa.gov>, "Robert Kavlock" <Kavlock.Robert@epamail.epa.gov>, "Hal Zenick"
<zenick.hal@epa.gov>, "David Dix" <dix.david@epa.gov>
From: Elizabeth Blackburn/DC/USEPA/US@EPA
Date: 12/03/2012 02 1677 Date: 12/03/2012 08:16PM Cc: "Megan Maguire" <maguire.megan@epa.gov>, "David Piantanida" <piantanida.david@epa.gov>

Subject: Dispersant causes more harm than good in oil spill

cleanups -- study

Hi all

Apparently there were about 30 stories today about this study. In the event we get a question about it, any suggested response about how it might relate to the work we did? Or should we say that we're reviewing the study and then just reiterate what we found back in 2010?

Thanks

Liz

News Headline: Dispersant causes more harm than good in oil spill cleanups -- study |

News Date: 12/03/2012 Outlet Full Name: Greenwire

Contact Name:

News Text: After more than 2 million gallons of Corexit 9527A, an oil dispersant, was poured into the Gulf of Mexico to clean up BP PLC's toxic oil spill in 2010, a new study has found those very dispersants could be doing even more harm to microscopic organisms that live in the water.

The dispersant was used to break apart the oil and stop it from being swept to shore.

In one of the first examinations of how oil dispersant affected plankton, the study published in the journal Environmental Pollution found the combination of oil and the dispersant becomes 52 times more potent that oil alone.

"There is a synergistic interaction between crude oil and the dispersant that makes it more toxic," said Terry Snell, co-author of the report and a Georgia Institute of Technology biologist. The Corexit "makes it more toxic to the planktonic food chain."

The dispersant makes the oil droplets even smaller, which makes it "bio-available" to tiny organisms, said Florida State University researcher Ian MacDonald. "The effect is a specifically toxic synergy -- the sum is worse than the parts."

An August 2010 study by U.S. EPA determined the dispersant-oil combination isn't worse for shrimp, fish and other sealife than oil alone already is. Yet several studies have found the mixture is more detrimental to the embryos of some fish species (Douglas Main, NBC News, Nov. 30). -- HP Liz Blackburn USEPA, Office of Research and Development 202-564-2192 Cell 202-436-2453